UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,054	10/17/2001	Yasunori Shingaki	027260-498	3205

7590 01/12/2005

Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. BOX 1404
Alexandria, VA 22313-1404

EXAMINER	
WILLIAMS, LAWRENCE B	
ART UNIT	**PAPER NUMBER**
2634	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/978,054	SHINGAKI, YASUNORI	
	Examiner	Art Unit	
	Lawrence B Williams	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because examiner suggests applicant place a comma after the word edge in line 3.

Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: Examiner suggests applicant rewrite lines 14-21 of page 2 for clarification.

Appropriate correction is required.

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Setoguchi et al. (US Patent 4,748,643) in view of Asano et al. (US Patent 5,636,343).

(1) With regard to claim 1, Setoguchi et al. discloses in fig(s) 4, 5, a serial-data-communication apparatus for transmitting and receiving serial data composed of a plurality of bits including a start bit at a head, comprising: edge-detection means for detecting (11, 12) a trailing edge of received data (col. 3, lines 51-59); start-bit-level-inspection means (detection & starting cct. (I, II)) for recognizing the reception of the start bit of said received data with the detection of said trailing edge provided by said edge-detection means, and monitoring a bit level of the start bit to examine whether the start bit maintains a predetermined bit level (col. 5, line 46- col. 6, line 4); and start-bit-detection-error-notification means (decision circuit, 17) which outputs a signal to a circuit (detection & start cct. (II), 16) said signal indicating occurrence of an error in detecting the start bit, when any change in the bit level of the start bit is detected by said start-bit-level-inspection means.

Setoguchi et al. does not however outputting the error detection signal to an external circuit. However, Asano et al. discloses in Fig. 6, outputting an error detection signal to an external circuit (col. 5, lines 14-26).

Therefore it would be obvious to one of ordinary skill in the art at the time of invention to add the addition of the invention of Asano et al. as a method of detecting discordance between devices without comparing signals by software (col. 5, lines 14-26).

(2) With regard to claim 2, Asano et al. also discloses wherein an error-notification means (1, 2) outputs a signal controlling the transmission and reception of the serial data, as an interrupt request signal (col. 5, lines 14-19).

(3) With regard to claim 3, claim 3 inherits all limitations of claim 1 above, as claim 3 only teaches the method of the apparatus disclosed in claim 1.

(4) With regard to claim 4, claim 4 inherits all limitations of claims 2 and 3 above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.) Kobayashi discloses in US Patent 5,726,638 a Method And Device For Serial Communication.

b.) Hansen et al. discloses in US Patent 5,978,865 a System For Performing DMA Transfers Where An Interrupt Request Signal Is Generated Based On The Last Of A Plurality Of Data Bits Transmitted.

c.) Ryu et al. discloses in US Patent 6,704,350 B1 an A-T Command Analyzing Device.

d.) Ito discloses in US Patent 5,623,522 Asynchronous Serial Data Receiving Device.

e.) Miesterfeld et al. discloses in US Patent 4,739,323 Serial Data Bus For Serial Communication Interface (SCI) Serial Peripheral Interface (SPI) And Buffered SPI Modes Of Operation.

f.) Kishigami et al. discloses in US Patent 5,787,132 Data Communication System Having Improved Synchronization Capability.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw
January 4, 2005

AMANDA T. LE
PRIMARY EXAMINER